



## PATENT ABSTRACTS OF JAPAN

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(54) METHOD AND DEVICE FOR REGULATING  
AUTOMATIC PULSE DURATION BASED ON  
IMPEDANCE FOR IMPACT ELIMINATIVE  
DEFIBRILLATION

(57) Abstract:

**PURPOSE:** To improve safety and reliability of defibrillation by sending a defibrillation impact into a heart by using a current pulse width setting way in a diagnosis of arrhythmia, and constituting so as to automatically regulate a pulse amplitude based on an impedance of the heart following the given defibrillation impact.

**CONSTITUTION:** A waveform analyzing part 71 in the integrated circuit(IC1) 70 monitors a heart rhythm and discriminate arrhythmia from a normal sine- waved rhythm, and when diagnosed it as an arrhythmia, a defibrillation impact impresses onto the heart as to either one of supraventricular tachycardia, atrial defibrillation and ventricle tachycardia or ventricle fibrillation by using a current pulse width setting by the integrated circuit(IC2) 30 through a switch provided in a high volt-

age transmission block 47. Next, an impedance of high voltage system after the defibrillation impact is given, is measured and an optimum pulse width relating to a measured impedance value is selected in reference to a list of proposed pulse duration, and the result is used as a proposed pulse width relating to the next defibrillation impact.

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